



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,517	06/01/2001	Anette Buschka	000500-301	9594

7590 09/27/2005

Ronald L. Grudziecki  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/870,517

Applicant(s)

BUSCHKA ET AL.

Examiner

Elizabeth M. Cole

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1771

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not state that the air-laid nonwoven gauze formed with an air-doffing apparatus card provides a "carded, porous, penetrable gauze layer". The specification teaches that the gauze is formed with the "aid of" an air-doffing apparatus card but does not teach that the gauze layer is carded. In particular, if the layer is formed by carding fibers and then air laying them, it is not clear that the resultant material would be carded, unless any fiber which has been previously carded would be considered to always be carded. In other words, carding is a process wherein staple fibers are separated, aligned and formed into a sliver. Carding is a distinct process from air laying. Air laying is process where air currents are used to transport and deposit fibers. Therefore, it does not appear that the specification teaches a carded gauze but rather teaches that carded fibers are then air laid to form the gauze, which is different from the claimed "carded gauze".

3. Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by a "carded" gauze in

Art Unit: 1771

the claims, since the claims teach an air laid nonwoven and, as set forth above, carding and air laying are two separate processes and it is not clear what is meant by a carded air laid nonwoven. Does this refer to a carding process which took place before air laying? For purposes of the art rejection below, any process which discloses employing carded fibers will be considered to teach a carded air laid fabric.

4. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura et al, U.S. Patent No. 4,018,646 and Fehrer, U.S. Patent No. 4,972,551 as set forth in the previous action.

5. Claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura in view of Ruffo and Fehrer as applied to claims above, and further in view of WO 97/45083 to Rosseland as set forth in the previous action.

6. Applicant's arguments filed 7/11/05 have been fully considered but they are not persuasive.

7. With regard to Ruffo, the amendment reciting that the fibers are carded is sufficient to remove Ruffo as a 102 reference since Ruffo does not teach carded fibers.

8. With regard to Matsumura, Applicant argues that Matsumura employs a binder. However, the rejection states that while Matsumura teaches a binder, Ruffo teaches a variety of ways in which bonding can be effected on a nonwoven material. See the previous office action. Applicant argues that Ruffo does not teach that the different methods of bonding are equivalents. However, Ruffo teaches that mechanical bonding and employing a bonding agent were both known methods of bonding fibrous webs comprising cellulosic fibers and reinforcing fibers. Ruffo does state that the use of

Art Unit: 1771

bonding agents and the use of mechanic entangling means are the same, i.e., Ruffo does not say that these two means of bonding are identical, but Ruffo clearly teaches that these are all known means of providing integrity to a nonwoven. Therefore, Ruffo teaches the equivalency of the methods. One of ordinary skill in the art therefore, would have been motivated to employ the different means taught by Ruffo to bond the nonwoven of Matsumura, i.e., bonding agents, mechanical bonding, etc. An express teaching of substituting one equivalent means for another is not required. Applicant argues that in Matsumura one skilled in the art has already selected chemical bonding means as being suitable and therefore any modification of this is unobvious. However, Ruffo clearly teaches that both methods can be used. Further, one of ordinary skill in the art would know that employing chemical bonding agents introduces another component into the nonwoven, increases potential sensitivities for users of the final product, increases cost, and may have a deleterious effect on the hand of the nonwoven. Therefore, the motivation to employ a mechanical means of bonding would be to avoid some or all of these potential problems. Of course, the opposite is also true, that employing chemical bonding would produce benefits such as increased strength, avoiding excessive compaction, etc. One of ordinary skill in the art would not be bound by either the teaching of Matsumura or the teaching of Ruffo alone. One of ordinary skill in the art would know that both methods could be used and would have the benefit of both the Matsumura and Ruffo disclosures. One of ordinary skill in the art would know that both methods produce both positive and negative results in the final product. The two methods would clearly have been recognized as equivalents in that they both

Art Unit: 1771

do the same thing, provide integrity to a nonwoven fabric, with each providing the fabric with different benefits and drawbacks. Therefore this rejection has been maintained.

9. With regard to Matsumura, Applicant argues that Matsumura does not disclose a carded, porous, penetrable gauze. However, Matsumura clearly teaches employing carded fibers. Applicant argues that Matsumura does not teach supplying carded fibers to the air doffing apparatus. With regard to the article claims, however, process limitations are not persuasive absent a showing by the applicant that any process differences result in an unobvious difference

10. Applicant argues that Matsumura does not teach employing a carding apparatus. However, Matsumura clearly teaches employing carded fibers at col. 8, line 35. The carded fibers are directed to a collecting surface by means of an air stream. The same process is used in Fehrer. Applicant argues that the use of a lickerin roll in Matsumura distinguishes the claimed method from the method of Matsumura. However, a lickerin is part of the apparatus of a carding machine. Therefore, the argument that the use of a lickerin teaches against carding is not persuasive. Further, the instant method claims recite "air-forming textile fibres with an air-doffing apparatus card to form on a wire a carded, nonwoven gauze." As set forth above, air laying and carding are two separate processes. Since Matsumura discloses employing carded fibers which are then supplied to the wire by means of air currents, (i.e., air laying), Matsumura teaches a carded air laid nonwoven.

11. Further, with regard to Matsumura, Applicant argues that since Matsumura teaches a seal roll which compresses the textile mat the mat would not be able to be

Art Unit: 1771

penetrated by the cellulosic fibers. However, there is nothing on the record to support this assertion. The seal roll protects the gauze layer while the gauze is being positioned to receive the fiber layer. A seal roll would not prevent at least a portion of the fibers from penetrating the gauze because if only one end of one fiber is in any way below the uppermost surface of the gauze, this would meet the claimed limitation. Once the gauze is positioned, Matsumura teaches that the short fibers are distributed on the long fiber layer under the influence of suction "so that at least some of the short fibers tend to grip and form an interfiber bond with the long fiber layer", (col. 8, lines 62-64). The gripping and formation of interfiber bonds equates to the claimed penetration of the gauze layer.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1771-

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

A handwritten signature in black ink, appearing to read 'Elizabeth M. Cole', is positioned above the printed name.

Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c